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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,412	10/01/2003	Tsuyoshi Yamamoto	NIT-293-02	5169
24956	7590	12/02/2004	EXAMINER	
MATTINGLY, STANGER & MALUR, P.C. 1800 DIAGONAL ROAD SUITE 370 ALEXANDRIA, VA 22314			YAM, STEPHEN K	
			ART UNIT	PAPER NUMBER
			2878	

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/674,412

Applicant(s)

YAMAMOTO ET AL.

Examiner

Stephen Yam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 October 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-18 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 11-18 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 01 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

This action is in response to Amendments and remarks filed on October 6, 2004. Claims 11-19 are currently pending.

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11, 12, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jöbbsis et al. US Patent No. 4,380,240 (hereinafter Jöbbsis '240) in view of Jöbbsis et al. US Patent No. 4,510,938 (hereinafter Jöbbsis '938).

Regarding Claim 11, Jöbbsis 240 teach (see Fig. 1) a head setter for using living body measurement by light (see Col. 3, lines 25-32), said head setter to be put on a living body, comprising an optical fiber holder (35) provided with at least a pair of optical fibers (75, 80), one for irradiation (see Col. 6, lines 51-52) and the other for detection (see Col. 6, line 67 to Col. 7, line 1), and a flexible resin part (30, 40-43) (inherently, Velcro is made of molded plastic, a form of resin- see Col. 6, lines 12-19) provided with a guide (30) that enables said optical fiber holder to move in a specific direction (by detaching and re-attaching the Velcro strips (40-43) in different positions on the guide (30), since the guide is flexible- see Col. 6, lines 3-9), wherein said optical fiber holder is detachably provided on the guide of said flexible resin part (see Col.

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6, lines 20-26). Regarding Claim 12, Jöbsis '240 teach (see Fig. 1) the flexible resin part having a stopper part (40-43) that prevents said flexible resin part from deforming (after strapping the device onto a body part- see Col. 6, lines 14-19), whereby said optical fiber holder can be placed at any spot on the living body (see Col. 3, lines 25-33 and Col. 6, lines 6-9). Regarding Claim 17, Jöbsis '240 teach (see Fig. 1) an optical measurement system by light (see Col. 3, lines 25-32), comprising a light irradiator (see Col. 4, lines 12-15) for irradiating a living body of a subject with light, and a light detector (see Col. 4, lines 15-20 and Col. 3, lines 9-15) for detecting the light that has been emitted from said light irradiator and which has propagated through the living body ("deeply penetrating light"- see Col. 5, lines 3-6), wherein said light irradiator and said light detector are installed in a head setter (see Fig. 1) to be placed on the living body (See Col. 3, lines 25-32), said head setter having an optical fiber holder (35) provided with at least a pair of optical fibers (75, 80), one for irradiation (see Col. 6, lines 51-52) and the other for detection (see Col. 6, line 67 to Col. 7, line 1), and a flexible resin part (30, 40-43) (inherently, Velcro is made of molded plastic, a form of resin- see Col. 6, lines 12-19) provided with a guide (30) that enables said optical fiber holder to move in a specific direction (by detaching and re-attaching the Velcro strips (40-43) in different positions on the guide (30)), said optical fiber holder being detachably provided on the guide of said flexible resin part (see Col. 6, lines 20-26). Jöbsis '240 do not teach an optical fiber hook supporting the optical fibers at other than an end portion of the optical fibers. Jöbsis '938 teach (see Fig. 1) a similar head setter, with an optical fiber hook (48) supporting optical fibers (51, 61) at other than an end portion of the optical fibers. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an optical fiber hook supporting the optical fibers at

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other than an end portion of the optical fibers, as taught by Jöbsis '938, in the head setter of Jöbsis '240, to reduce physical strain on the optical fibers and provide additional securing of the optical fibers.

3. Claims 13-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ivers et al. US Patent No. 5,339,810 in view of Jöbsis '938.

Regarding Claims 13 and 14, Ivers et al. teach (see Fig. 1 and 5) a head setter for using living body measurement by light (see Col. 2, lines 19-30), said head setter having a shape to be put on a living body (see Col. 3, lines 61-65 and Col. 4, lines 53-54), comprising a main body (11, 12, 14) comprised of a flexible resin part (14) (inherently, plastic is a resin- see Col. 3, lines 55-57), and equipped with an optical fiber holder (86), a stopper (top of (22)), and a joint ((36) on (12)), said optical fiber holder provided for holding an optical fiber (84) (see Fig. 5 and Col. 5, lines 42-51) for irradiation, said flexible resin part provided with a guide (11) that enables said optical fiber holder to move in a specific direction, and said stopper and said joint fixed on said main body for disposing said optical fiber holder at any position between said stopper and said joint (see Col. 4, lines 44-57), wherein said optical fiber holder is detachably provided on the guide of said flexible resin part (see Fig. 5). Regarding Claims 14, 16, and 18, Ivers et al. teach (see Fig. 5) the optical fiber holder provided with an optical fiber for irradiation connected to a light irradiator (82). Regarding Claims 15 and 18, Ivers et al. teach (see Fig. 1) the main body shaped with a semicircular portion (12) (see Col. 4, lines 4-6) to be put on a living body (see Col. 3, lines 61-65 and Col. 4, lines 53-54), wherein the stopper restricts the movement of the optical fiber holder on the guide of said flexible resin part (see Col. 4, lines 48-55), and wherein said

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stopper is fixed on a position (left/right edge) shifted from the center position of the semicircular portion of said main body. Ivers et al. do not teach the embodiment for also provided with and holding an optical fiber for light detection, connected to a light detector, or an optical fiber hook supporting the optical fibers at other than an end portion of the optical fibers. However, Ivers et al. teach (see Fig. 12) a separate similar embodiment of a head setter for using living body measurement by light, with an optical fiber holder (172) provided for holding a pair (in (178)) of optical fibers, one for irradiation (part of (178) going to (182)) and the other for light detection (part of (178) going to (186)), and provided with the two optical fibers, one (part of (178) going to (182)) for irradiation connected to a light irradiator (182) and the other (part of (178) going to (186)) for detection connected to a light detector (186). Jöbsis '938 teach (see Fig. 1) a similar head setter, with an optical fiber hook (48) supporting optical fibers (51, 61) at other than an end portion of the optical fibers. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a second optical fiber for light detection as taught by the Fig. 12 embodiment of Ivers et al., and an optical fiber hook supporting the optical fibers at other than an end portion of the optical fibers, as taught by Jöbsis '938, in the Fig. 5 embodiment of Ivers et al., to provide a disposable measurement device while retaining both the LED and detector, as taught by Ivers et al. (see Col. 8, lines 7-12), and to reduce physical strain on the optical fibers and provide additional securing of the optical fibers.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 11-19 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Yam whose telephone number is (571)272-2449. The examiner can normally be reached on Monday-Friday 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on (571)272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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THANH X. LUU  
PATENT EXAMINER